



# ***PESTICIDE-FREE PARKS***



## **Program Overview**

***Seattle is taking an exciting next step in its efforts to  
reduce pesticide use....***

Six feature parks distributed geographically throughout the city have been designated as pesticide-free. The Pesticide-Free Parks program reflects the City's ongoing commitment to protecting and enhancing our community and environment through the continual pursuit of excellence in landscape management.



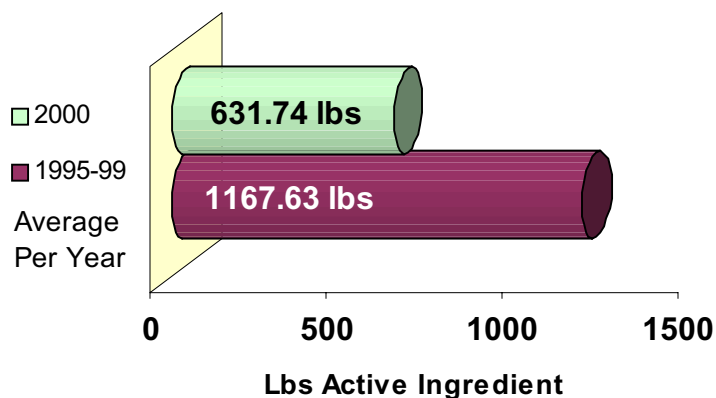
**It is the policy of the City of Seattle to promote environmentally sensitive vegetation management that minimizes the potential risks from pesticide use while preserving landscape assets and protecting the health and safety of the public and City employees.**

To further the goals of this policy, the City adopted a pesticide use reduction strategy in 1999. The two main components of this strategy are to (1) eliminate the use of the most-hazardous pesticides and (2) achieve a 30 percent reduction in overall pesticide use. This strategy is part of the City's Environmental Management Program, which helps us to identify, prioritize and reduce the environmental impacts of City operations and services.

The City met the goal to phase-out the most potentially hazardous herbicides and insecticides by its target date of June 2000 and has already surpassed its goal of reducing overall use by 30 percent by the end of 2002, primarily due to employee-driven innovations. To further reduce pesticide use, Seattle is testing alternatives such as heat and hot water weed control techniques, low-maintenance landscape designs, beneficial insects to control destructive pests, various natural and synthetic mulch materials, and ways to enhance plant health to increase pest tolerance.

### ***City Exceeds Goal in 2000***

#### **Citywide Pesticide Use Down by 46%**





## ***Another Big Step***

The Pesticide-Free Parks initiative is the next step in this rapidly evolving program. The goals of the initiative are to:

- Provide communities the opportunity to enjoy parks maintained without the use of pesticides
- Demonstrate “best practices” for managing landscapes and pests
- Evaluate innovative products and practices that may provide effective alternatives to pesticide use
- Serve as an education and training resource for City staff and residents
- Increase awareness of a somewhat different feel and look as the City designs lower-maintenance landscapes
- Help the City to better understand what is necessary to maintain parks with fewer or no pesticides over the long term
- Aid the development of design guidelines for low or no pesticide park maintenance

### ***Pilot Studies and Beyond***

The pesticide reduction pilot studies to date have taught us much about reducing pesticide use by employing alternatives such as radiant heat weeders, beneficial insects, and mulching. The pesticide-free parks are intended to help us understand how to manage City land over the long term without pesticides. The City will closely monitor these parks and take the lessons learned out to other sites.

## ***A Little History.....***

While pesticides are not used routinely on City property, and crews have significantly reduced the amount and toxicity of the products used over the last 15 years, the City continues to strive to improve its environmental performance in landscape management. Pesticides are used on City property as part of an integrated program of controls known as “Integrated Pest Management,” which includes monitoring, improving plant health, establishing pest tolerance thresholds, and considering non-chemical controls, such as physical, mechanical, and biological. When used on City property, pesticides are applied in a highly regulated, targeted manner by well-trained crews.



*Webster Playground*



## ***What Parks Will Be Maintained As Pesticide-Free Parks?***

### ***Feature Pesticide-Free Parks***

#### **TT Minor Playground**

7<sup>th</sup> Avenue E. & E. Union

#### **Webster Playground**

3014 N.W. 67<sup>th</sup> Street

#### **Meridian Playground**

4629 Sunnyside Avenue N.

#### **Fairmont Playfield**

5400 Fauntleroy Way S.W.

#### **Bradner Gardens Park**

1722 Bradner Place S.

#### **Beer Sheva Park**

8650 55<sup>th</sup> Avenue S.

(Map on Last Page)

## ***How Were These Parks Chosen?***

The sites were selected from a list of parks nominated for consideration by City gardening staff. The overarching consideration in selecting the parks was the ability to successfully sustain pesticide-free management and to maximize the lessons the City can learn. The following criteria were used to finalize the list:

***Park Features*** Parks with features such as ornamental beds, turf, play areas, ball fields, and picnic areas were considered desirable, as they represent the challenges faced most often across the parks system and provide a range of recreational opportunities for residents who will use these sites.



*Meridian Park*

***Community Support*** These sites will demonstrate new ideas and techniques for pesticide-free maintenance and may take on a different look due to low-maintenance landscape designs and increased pest tolerance. Therefore it was considered important that the surrounding community has a history of active involvement in the park.

***Educational Opportunities*** Opportunities for site improvements and demonstration of alternatives was considered to ensure that these parks would be an educational resource for City staff and residents. Proximity to schools was considered a favorable element due to potential opportunities for students to enjoy and learn from these parks.



## ***Minor Pesticide-Free Parks\****

### **Baker Park on Crown Hill**

Mary Anne NW/NW 83<sup>rd</sup> St

### **Belvoir Place**

3659 42<sup>nd</sup> Avenue N.E.

### **Denny Blaine Lake Park**

Madrona Drive E./E. Denny Way

### **West Montlake Park**

2815 West Park Drive E.

### **Elliot Way Bikeway**

Elliot Bay Trail/North Myrtle Edwards Park

### **Magnolia Tidelands**

West Ruffner to Elliott Bay Marina

### **Day Street Park**

1400 Lakeside Avenue S.

### **Lake City Mini Park**

Lake City Way/N.E. 125<sup>th</sup> St

*\* In addition to the six feature Pesticide-Free Parks, eight additional parks will be maintained without the use of pesticides. As these parks may be smaller and some may not offer as many amenities, they are considered to be "minor" pesticide-free parks.*

***Landscape Elements*** Sites with many or extremely large areas of plant beds or other particularly high-maintenance features were not considered appropriate. While improvements and increased maintenance are anticipated in some of the selected parks, it is also important that Seattle be able to provide multiple sites distributed across the City, rather than be limited to fewer large sites.

***Pesticide Application History*** Parks with significant historical pest problems requiring chemical control were not considered. The City hopes to learn lessons from the selected sites that can be applied at its more challenging parks.

***Size*** Because an increase in maintenance is to be expected, the parks need to be of a manageable size. Taking on extremely large sites would impair the City's ability to learn how to successfully manage pesticide-free parks over the long-term in a variety of settings.



***Noxious Weeds*** Parks with a history of substantial noxious weed problems were avoided. Legal requirements to control noxious weeds limit the ability to employ a full range of alternatives, and sometimes unproven control strategies. It is hoped that the lessons learned at the selected sites can be transferred to noxious weed management to reduce the need for chemical control of these regulated plants.

***Natural Areas*** Natural areas with intact native plant communities were preferred over those with significant noxious or invasive weeds.



## ***Integrated Pest Management (IPM) Plans***

IPM Plans will be developed for each of the six feature Pesticide-Free Parks. These plans will contain necessary information to make sound decisions about plant and pest management. They also serve as institutional memory, detailing how a pest problem has been managed. Each plan will incorporate the elements described below.



*Bradner Gardens Park*

- ± Describe site management goals and objectives
- ± Detail site conditions, noting the presence of or proximity to surface water, steep slopes, restricted access areas, natural areas, etc.
- ± Inventory of major park features, including:
  - Landscape types (turf, trees, sports field, shrub beds, annual plant beds, natural areas, etc.)
  - Recreational features (playground, pool, picnic tables, shelter, fountain, etc.)
  - Park infrastructure (fences, paths, parking areas, etc.)
  - Significant plants or trees present (80-year-old maple, ornamental cherries donated by community etc.)
  - Irrigation/drainage systems
- ± Identify management issues
  - List past pest problems and how they have been managed, including:
    - Monitoring
    - Pest tolerance thresholds
    - Potential pest predators
    - Cultural and non-chemical management techniques employed and their effectiveness
    - Pesticides that have been used including frequency, concentration, method of application and effectiveness
    - Potential non-target impacts and how these have been minimized
    - Other potential management alternatives
- ± Evaluate past pest management efforts, including monitoring, and determine if modifications should be made to achieve best practices
- ± List additional pest problems typical of similar sites and the best practices for managing these
- ± Create a detailed monitoring plan with pest tolerance thresholds
- ± Identify site modifications that would improve plant and pest management, such as the installation of hard borders to prevent lawn weeds from infesting beds, paving strips under fence lines to reduce trimming needs, lower maintenance plantings, etc.
- ± Highlight best practices being demonstrated at the site
- ± Describe site maintenance labor and cost tracking information, if available



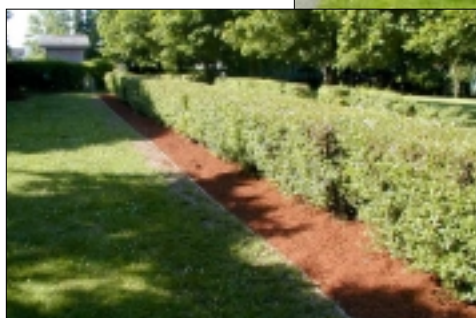


## ***Why Can't All City Property Be Pesticide Free?***

The City actively manages more than 12,000 acres of land, including 500 miles of electrical transmission right of way, production greenhouses, specialty gardens, such as the Rose Garden at the Woodland Park Zoo and the Japanese Garden at the Arboretum, a conservatory with rare plants, golf courses, 30,000 street trees, large natural areas, and electrical substations where the presence of weeds can result in electrocution. As challenging as we find maintaining our own yards at times, imagine the challenges presented by such vast and diverse landscapes. Seattle is undertaking this initiative not only to be able to provide its residents pesticide-free park options, but also to learn more about sustaining and enhancing public lands in the most environmentally-friendly way possible.

## ***Coming to a Pesticide-Free Park Near You***

The City will make improvements in some of the pesticide-free parks to make them easier to maintain. Some examples include paving strips under fence lines, hard borders around shrub beds and trees, and lower maintenance planting schemes.



## ***Program Review***

A Pesticide-Free Parks team composed of the senior gardener for each feature park, the department IPM coordinator, pesticide reduction coordinator, manager of citywide horticulture, crew chiefs, and a representative of the Office of Sustainability and Environment will meet twice a year to review progress. The team will review maintenance and pest monitoring records, discuss issues, and identify opportunities for applying the lessons learned to other parks. Every two years, the Pesticide-Free Parks team will thoroughly evaluate the program and recommend next steps.



*West Montlake*

While it is highly unlikely, an imminent threat to human health and safety, like a yellow jacket nest in a playground, may necessitate the use of pesticides even in these parks. We will provide notice of any pesticide application at key entrances to each pesticide-free park and on the City's website.



## *Seattle's Pesticide-Free Parks*



*A joint Project of*

### **City of Seattle**

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